The Indiana Industrial Group's Response to the Commission's Data Requests Regarding Its Electric Service Quality Rulemaking

The Indiana Industrial Group, by counsel, in response to the invitation from the Commission, hereby submits its comments regarding the Commission's electric service quality rulemaking data requests. While the Commission's data requests are directed at Indiana public utilities to gather information about their operations and attention to service quality issues, the Indiana Industrial Group desires to participate in this rulemaking proceeding to provide comments regarding electric service quality from the viewpoint of Indiana industrials.

Introduction

Indiana Industrial Group is an ad hoc group of industrial entities with facilities located in the State of Indiana who purchase large quantities of electricity and related services from Indiana public utilities. The Indiana Industrial Group believes that the consistency of power quality is an issue of importance for the Commission to examine, because power quality problems have caused millions of dollars in damages to Indiana industrials. We ask the Commission to consider these issues of electric service quality in conjunction with the Commission's current rulemaking regarding tariff provisions that limit a public utility's liability for service interruptions, because both subjects address the type of service problems encountered by Indiana public utility customers and the accountability of public utilities for those problems. However, the Indiana Industrial Group cautions the Commission to avoid setting standards for service quality that would remove or impair the legal remedies industrials currently have at their disposal in Indiana for addressing power quality problems with their electricity service providers.

Power Quality Problems are Common and Costly for Industrials

Members of the Indiana Industrial Group have experienced problems with the quality of electric service, including but not limited to voltage fluctuations, power surges and outages. Power quality problems for industrials are a widespread issue. A recent study from the Electric Power Research Institute surveyed approximately 1000 industrial manufacturing businesses and

"digital" businesses that rely on data storage and processing and found that, combined, those sectors lose $45.7 billion annually in electricity outages, and lose another $6.7 billion to electric quality problems including voltage variations.

Even service quality problems that are "momentary" in nature, as brief as a few cycles, can be costly to industrials. For example, serious damage can be done to manufacturing equipment if an industrial facility experiences even a brief electricity outage. Some manufacturing equipment is designed to be operated on a continuing basis, and any shutdown of the equipment must be done in a gradual, controlled manner to prevent premature cooling, which can cause cracking and other damage. Service quality problems, including outages, prevent that controlled shutdown from happening. As another example, some industrial facilities have manufacturing processes that utilize electronic alarms to warn of system malfunctions. Those alarms can disengage during momentary power outages, and may not re-engage when power is restored, which can result in damage to the manufacturing system.

In addition to the damage caused by service quality problems, a source of continued frustration for Indiana industrials is the lack of communication from public utilities regarding service quality problems. This lack of communication involves both problems that are anticipated by the public utility and problems that actually have occurred. For example, one member of Indiana Industrial Group owns a facility in Indiana that is served by two circuits, and pays its public utility to ensure that both circuits are functioning so the facility can operate. Without any notice to the industrial, the public utility planned to have one circuit down for an extended period of time, greatly increasing the risk of an outage or other service quality problem. Had the utility notified the industrial in advance of its desire to have one of the circuits down, the industrial could have decided whether to increase production before the circuit went down, to guard against the adverse effects an outage would cause. Even where power quality problems cannot be predicted, the utility often is in a position to know whether the risks of a power quality

problem are increased in a given situation, and should communicate that information to the customer to allow the customer the opportunity to take precautions.

Public utilities in Indiana frequently do not provide industrial customers with the information the industrials need to understand why an outage or other service quality problem occurred. The inability to discover why service quality problems have occurred prevents the root cause of the problem from being addressed and remedied. As a result, the industrials have no way of knowing whether the service quality problem was an anomaly not likely to reoccur, or the product of a systematic problem requiring a more detailed analysis to provide a remedy.

When a utility and customer share information about power quality problems, not only are those parties benefited, but other utilities and customers can use that information to guard against power quality problems. Many corporations that operate within other states can provide assistance and share lessons learned among all of the utilities that serve their facilities. A cooperative relationship between utilities and industrials can result in improvement for not only the industrials, but also the general public including smaller commercial operations and individual residential customers that also are impacted by power quality problems.

It is important for public utilities to inform the industrials of the "electrical environment" in which a facility is sited, so the industrial can evaluate the potential vulnerabilities of the utility system serving its facility. The Institute of Electrical and Electronics Engineers ("IEEE") has standards that provide a methodology to define that electrical environment. For example, the abstract for IEEE Standard 1346-1998 "IEEE recommended practice for evaluating electric power system compatibility with electronic process equipment" reads as follows:

> A standard methodology for the technical and financial analysis of voltage sag compatibility between process equipment and electric power systems is recommended. The methodology presented is intended to be used as a planning tool to quantify the voltage sag environment and process sensitivity. It shows how technical and financial alternatives can be evaluated. Performance limits for utility systems, power distribution systems, or electronic process equipment are not included.

Another tool that would be helpful in evaluating risk for industrials would be for the utilities to report the reliability of their system for benchmarking against other utilities. The abstract for IEEE Standard 1366 entitled "IEEE trial-use guide for electric power distribution reliability indices" reads as follows: "Useful distribution reliability indices, and factors that affect their calculation, are identified. This guide includes indices that are useful today as well as ones that may be useful in the future. The indices are intended to apply to distribution systems, substations, circuits, and defined regions." Providing this information to industrials would allow the industrials and the utilities to identify and discuss areas of weakness in the utilities' systems.

The Indiana Industrial Group believes that public utilities can prevent the vast majority of power quality problems that their customers experience. Public utilities should be required to take all reasonable steps to prevent power quality problems, and should not be shielded from liability when they fail to do so. In addition to taking steps to minimize power quality problems, public utilities should be required to provide information regarding their system's vulnerabilities, so potential problems can be addressed and past problems can be studied and, perhaps, prevented from recurring, Neither the utility nor their customers are islands. Things that happen on the utility system impact their customers and events that occur in the customer's distribution system impact the utility system, and thus, other customers. The focus should be on creating a cooperative environment with an open exchange of information.

Legal Remedies for Power Quality Problems

The damage caused by service quality problems can cost an industrial facility millions of dollars in damaged equipment, increased labor expenses, higher cost production alternatives and lost customer business. The remedies afforded Indiana industrials often are severely limited by public utility contracts or tariffs that limit the utility's liability for service interruptions and service quality problems. In Indiana, industrials and other consumers of electricity have some limited means of recovering damages caused by certain service quality problems, through the Uniform Commercial Code and the Indiana Product Liability Act.

Customers of utilities who have complaints about service quality problems are not restricted to airing their grievances at the Commission. Customers now have the opportunity to bring their complaint to Indiana courts under "traditional" legal theories, as the result of the Supreme Court of Indiana's decision in *Austin Lakes Joint Venture v. Avon Utilities, Inc.*, 648 N.E.2d 641 (Ind. 1995).

Article 2 of the Uniform Commercial Code provides one form of relief for utility customers suffering damages caused by service quality problems. Article 2 of the UCC applies to "transactions in goods." "Goods" is defined in part by the UCC as "all things (including specifically manufactured goods) which are movable at the time of identification to the contract for sale . . .." Electricity was recognized as a "good" under the UCC in *Helvey v. Wabash County REMC*, 278 N.E.2d 608 (Ind.Ct.App. 1972), a case filed to recover damages from a utility that supplied electricity to a customer at incorrect voltage levels. The court in *Helvey* recognized that electricity had the characteristics of a "good" in that it could be considered personal property, it is subject to ownership, it may be bartered and sold, it may be stolen and it may be taxed.

The most obvious benefit of having electricity considered a "good" is the ability of a customer to avail itself of UCC remedies, including breaches of implied warranties of merchantability and fitness for a particular purpose. A buyer of electricity who demonstrates that a utility has breached implied warranties of merchantability or fitness for a particular purpose may be entitled to recover incidental and consequential damages. *See* Ind. Code § 26-1-2-715. Such damages include any "reasonable expense" incident to the breach, "injury to person or property proximately resulting from any breach of warranty," and "any loss resulting from general or particular requirements and needs of which the seller at the time of contracting had reason to know. . .." *Id.*

A notable case involving service quality problems was decided a few years ago by the Indiana Court of Appeals. In *Indiana Glass Co. v. Indiana Michigan Power Company*, 692 N.E.2d 886 (Ind.Ct.App. 1998), an industrial plant incurred damage to its manufacturing

processes when the public utility supplied electricity to the plant at incorrect voltage levels. The court upheld a ruling that the plant had viable claims that the utility breached the implied warranties of merchantability and fitness for a particular purpose, and did not question that incidental and consequential damages were available to the plant under the Uniform Commercial Code.

The Indiana Product Liability Act also provides an opportunity for redress to customers of public utilities who experience a service quality problem. Just as electricity is considered a "good" under the UCC, it can be considered a product under the Product Liability Act when specific conditions are met. Under the Act, a seller of a product is liable for damages caused by that product if, when placed in the stream of commerce, the product was in a "defective condition unreasonably dangerous to any user or consumer or to the user's or consumer's property. . .." The seller will be liable under those circumstances even if the seller had exercised "all reasonable care" in distributing the product.

Electricity is treated as a "product" under the Product Liability Act only if it is in a "marketable and marketed state at the time it causes the injury," which means it must be in the form of an "end product" that has reached its "destination," *i.e.*, a home, factory or a customer meter. *Bamberger v. Feibleman v. Indianapolis Power & Light Co.*, 665 N.E.2d 933, 937 (Ind.Ct.App. 1996). Where those conditions are met, utilities have been found liable under the Products Liability Act. *See, e.g., Public Service Indiana, Inc. v. Nichols*, 494 N.E.2d 349 (Ind.Ct.App. 1986).

While the *Austin Lakes* case has benefited industrials and other public utility customers by opening the door to remedies under the UCC and Products Liability Act, those remedies do not provide complete relief. For example, while both remedies apply to problems with electricity that has been provided to a customer, it has been held that neither remedy may apply to damages caused by an electricity *outage.* Some cases have held that electricity is not a "good" under the UCC unless the electricity has reached the customer as part of a business transaction. *Hedges v.*

Public Service Co. of Indiana, Inc., 396 N.E.2d 933 (Ind.Ct.App. 1979). Other cases hold that the Products Liability Act does not provide a remedy where electricity has failed to reach the customer's meter. *See Bamberger*, 665 N.E.2d at 937.

Without the benefit of the UCC or Products Liability Act, customers who incur damages as a result of an electricity outage often are restricted in court to alleging negligence against the public utility. Unfortunately, even where a public utility's negligence has caused significant damage to its customer, the utility often is shielded by a contract or tariff provision that protects the utility against damages caused by its own negligence. As discussed in the Indiana Industrial Group's statement submitted in the Commission's investigation in Cause No. 42002, it is inappropriate and economically unsound for Indiana public utilities to be insulated from the consequences of their own negligence, and the rights of customer redress can vary significantly depending on the service territory involved. For example, while some tariffs permit recovery when the public utility is found to be "grossly negligent," SIGECO's customers do not even have that option. SIGECO's limit of liability provision states that it "shall not be liable for any damages which the Customer may sustain by reason of the failure of the energy, or failure or reversal of phases, whether caused by accident, repairs or other uses."

The Indiana Industrial Group agrees with the Commission's statement in its March 6, 2002, Order in Cause 42002 (later rescinded in favor of the rulemaking procedure), that:

> the vast majority - if not all - service interruptions [are] due to circumstances within the utility's control and completely outside the control of the consumer. At the same time, an individual consumer has virtually no ability to reject any conditions contained within a tariff. Therefore, the Commission concludes that the traditional policy arguments favoring the unilateral limitation of a utility's liability do not justify allowing the practice to continue.

March 6, 2002 Order at p. 3. If public utilities are protected against their own negligence, that presents a disincentive for public utilities to ensure adequate electric service quality.

The Commission Should Not Impose Standards for Power Quality That Would Impair Or Eliminate Existing Legal Remedies

The Indiana Industrial Group believes that there are affirmative steps the Commission can take to improve the level of electric service quality in Indiana, by requiring utilities to make full disclosure of the causes of service quality problems, and by restricting those occasions on which a public utility may shield itself from liability for damages caused by its own negligence. However, it appears that the Commission is considering whether to develop and impose standard measures for electric service quality, which may have the unintended consequence of impairing a customer's ability to seek redress for damages caused by power quality problems.

In the July 31, 2001, Final Report in the Commission's investigation into the adequacy and reliability of electric service in Indiana (Cause No. 41736), the Commission acknowledged suggestions by the OUCC, Citizens Action Coalition and the AFL-CIO that the Commission develop standards for electric service quality. The Indiana Industrial Group is concerned that such standards, if imposed, might have detrimental consequences in litigating service quality issues.

For example, assume "x" is a service quality standard that allows for occasional power outages of no more than 2 minutes in duration. If a public utility provides electric service under that standard to an industrial facility that needs to have a continuous electricity supply to keep its equipment functioning, the quality of service will be inadequate for that industrial facility, and damages likely will result. Under the present state of the law, the industrial facility could pursue recovery of damages in court against the utility. However, if the Commission adopts "x" as a reasonable service quality standard, a public utility could delay litigation to force a Commission investigation into whether its service met the "x" standard, which may be permitted under the *Austin Lakes* holding. If the public utility met the "x" standard, then the public utility may have a basis for escaping liability in court, even if it had actual knowledge that the "x" standard was

inadequate for the needs of that industrial facility. The development of a service quality standard, therefore, may not have the desired effect of benefiting public utility customers.

Conclusion

The Indiana Industrial Group looks forward to participating in this proceeding, because its members have a vested interest in seeing service quality conditions improve in Indiana. While the establishment of service quality standards may not be beneficial to Indiana public utility customers, there are steps the Commission can take to cause service quality to improve, including, but not limited to, requiring disclosure by public utilities of the root causes of service quality problems, and restricting the ability of public utilities to protect themselves against their own negligence.